34. A system, comprising:

a) a packet-switched network having nodes;

b) means at each node for repeatedly examining status of links connecting to the node, and

i) if a change in status is detected by the means, flooding the network with news of the change in messages which are self-propagating and self-terminating, and

ii) if the means detects no change in status of a link for a predetermined interval T2, then flooding the network with news of the status existing at time T2.

35. Apparatus according to claim 34, wherein the steps of paragraphs (a) and (b) are repeated after that of paragraph (c).

36. Apparatus for use with a base node within a network, comprising:

a) means for maintaining a status table which indicates operational status of data links in the network;

b) means for testing operability of data links connected to the base node, and

i) if testing indicates a data link DEF connected to the base node is defective,

A) generating a new Route Status Packet, RSP, which

1) identifies the defective data link DEF,

2) identifies the base node as originator of the new RSP,

3) contains an initial age of the RSP, and

4) contains a sequence number of the RSP; and

B) transmitting copies of the new RSP to all neighbors of the base node, but not using data link DEF.

37. Apparatus according to claim 36, and further comprising:

c) means for detecting whether an incoming RSP originating from another node N is received at the base node, and, if so,

i) comparing the incoming RSP with previous RSPs received from node N, and

A) if the incoming RSP has a sequence number exceeding that of a

previous RSP received from node N, then

1) accepting the incoming RSP, and

2) using data in the incoming RSP to update the status table; and

B) if the incoming RSP has a sequence number which does not exceed that of a previous RSP received from node N, discarding the incoming RSP.

38. Apparatus according to claim 37, and further comprising means for:

d) using data in the incoming RSP to update the status table,

e) decrementing age of the RSP, and

f) transmitting copies of the age-decremented RSP onto links leading from the base node.

39. Apparatus according to claim 37, and further comprising means for:

d) receiving an incoming RSP at the base node; and

e) ascertaining whether the incoming RSP received is a copy of an RSP previously originated by the base node and, if so, discarding the RSP.

40. Apparatus according to claim 37, and further comprising:

d) means located at the base node, for queuing data packets which would be transmitted over the defective data link DEF, while data link DEF is defective.

41. Apparatus according to claim 37, and further comprising:

d) means for transmitting the queued data packets onto data link DEF when the base node receives information indicating that data link DEF is operational.

42. Apparatus according to claim 38, and further comprising:

g) means for updating the status table at the base node, to indicate correct status of data link DEF.

43. Apparatus according to claim 37, and further comprising:

d) means for generating substitute routes using operational links for packets in the queue, and initiating a process of emptying the queue, using the substitute routes.